

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0877156003**
Status: **Planned for Obsolescence**
Description: 1.00mm (.039") Pitch, PCI Express* Connector, 36 Circuits, Nylon 6/6 Glass-filled, Black Housing, Phosphor Bronze, Gold (Au) Flash, with Plastic Pegs, 3.00mm (.118") Solder-tail, Lead Free

Documents:

[3D Model](#) [Product Specification PS-87715-200 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family Edge Card Connectors
 Series [87715](#)
 Comments PCI 1 lane
 Component Type Edgecard to PCB
 Product Name PCI Express*

Physical

Circuits (Loaded) 36
 Circuits (maximum) 36
 Circuits Detail All Signal
 Durability (mating cycles max) 50
 Entry Angle Vertical (Top Entry)
 Flammability 94V-0
 Keying to Mating Part Yes
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 PC Tail Length (in) 0.118 In
 PC Tail Length (mm) 3.00 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.093 In
 PCB Thickness Recommended (mm) 2.40 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.039 In
 Pitch - Mating Interface (mm) 1.00 mm
 Pitch - Term. Interface (in) 0.039 In
 Pitch - Term. Interface (mm) 1.00 mm
 Polarized to Mating Part Yes
 Temperature Range - Operating -55°C to +85°C
 Termination Interface: Style Through Hole

Electrical

Current - Maximum per Contact 1.1A
 Voltage - Maximum 50V AC (RMS)/DC

Solder Process Data

Lead-free Process Capability Wave Capable (TH only)
 Process Temperature max. C 245

Material Info

Reference - Drawing Numbers

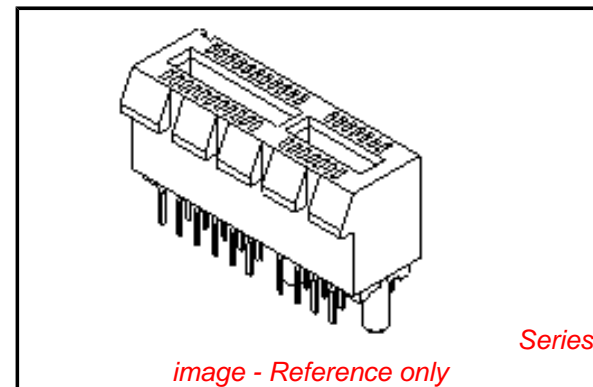


image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status
Not Reviewed

China RoHS



Need more information on product environmental compliance?

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[87715Series](#)

Mates With

PCI Express Card

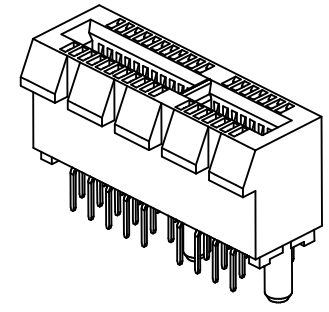
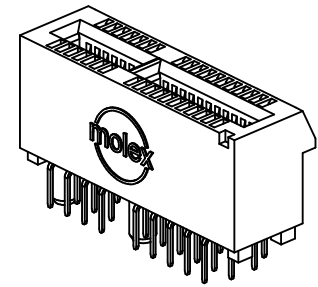
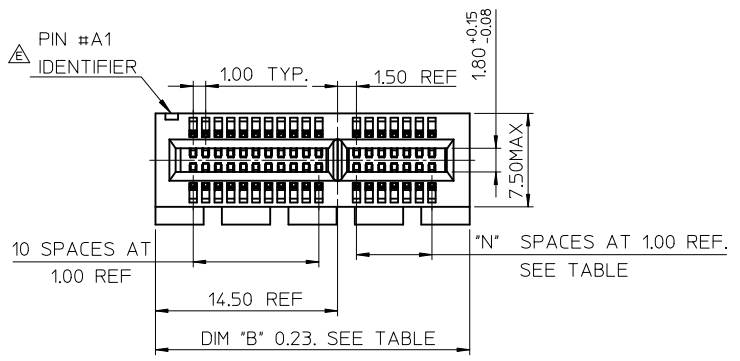
Packaging Specification
Product Specification
Sales Drawing
Test Summary

PK-87715-207
PS-87715-200
SD-87715-207
TS-87715-207

* PCI Express is a registered trademark of PCI-SIG®

This document was generated on 06/01/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



NOTES:

1.MATERIALS:

1-1.HOUSING: SEE TABLE .GLASS FIBER FILLED UL94V-0.
COLOR: SEE TABLE.

1-2.CONTACT: SEE TABLE

2.PLATING:

2-1.CONTACT AREA: GOLD, THICKNESS : SEE TABLE .
2-2.SOLDER TAIL: 100 MICRINCH MIN. TIN PLATING.
2-3.UNDER PLATING: NICKEL PLATING OVERALL.

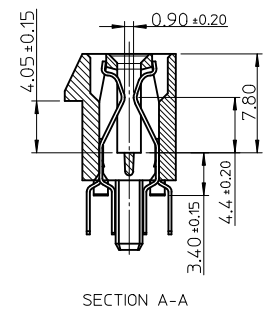
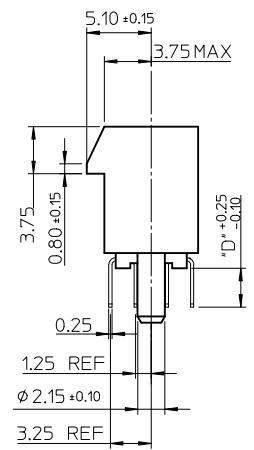
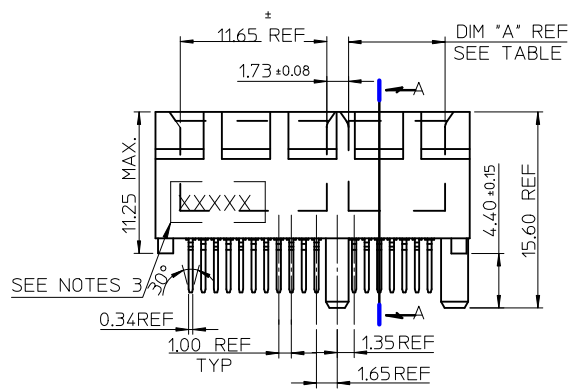
3.WEEK CODE: XX(YEAR) XXI(WEEK) X(LOCATION).

4.PRODUCT SPECIFICATION REFER TO PS-87715-200.

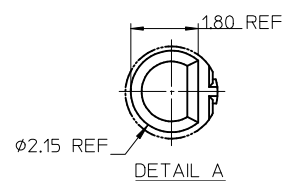
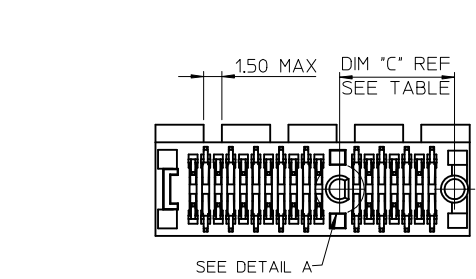
5.PACKAGING SPECIFICATION REFER TO PK-87715-207.

6.TEST SUMMARY:REFER TO TS-87715-207.

7.LEAD FREE AND ROHS COMPLIANCE PRODUCT.



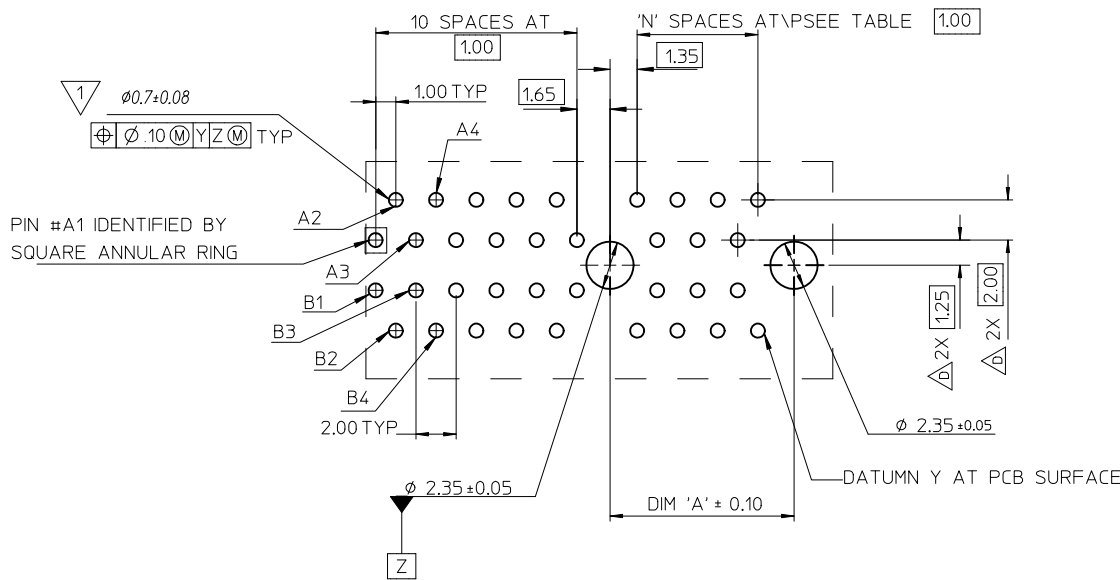
SECTION A-A



CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'	DIM 'B'	DIM 'C'
X4	64	20	21.65	39.00	23.15
X8	98	37	38.65	56.00	40.15

PCB THK (REF)	DIM 'D'
1.60	2.30
1.58	2.54
2.36	3.00

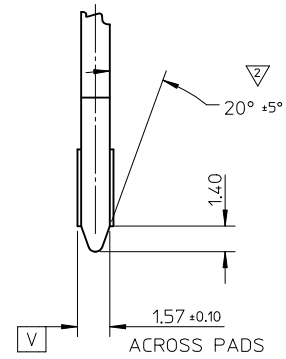
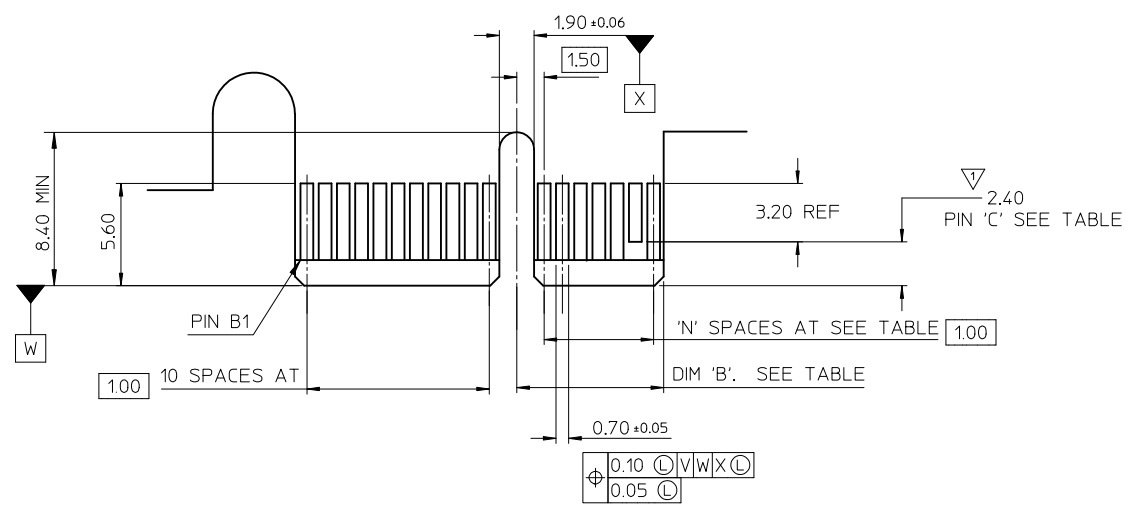
REVISED IEC NO: SH2010-0425 DRWR:ZHANG 2010/05/14 CHYKD:ALLEN L IN 2004/07/20 APPR:X.J.SONG 2010/06/03	QUALITY SYMBOLS F=0 E=0 E=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				mm	INCH	METRIC			
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE		
		3 PLACES	± ---	± ---	TOM	2004/07/20	PCI EXPRESS		
			2 PLACES	± 0.25	± ---	CHECKED BY	DATE	EDGE CARD CONNECTOR	
			1 PLACE	± 0.25	± ---	ALLEN LIN	2004/07/20	(LEAD FREE VERSION)	
			ANGULAR ± 3 °			APPROVED BY	DATE	MOLEX INCORPORATED	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			WILSON	2004/07/20		
					SIZE	MATERIAL NO.		DOCUMENT NO.	
					A3	SEE SHEET 4		SD-87715-207	
					THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SHEET NO. 1 OF 4	



1 THE HORIZONTAL AXIS FOR THE HOLE PATTERN IS ESTABLISHED BY A LINE THROUGH THE CENTER OF THE TWO $\phi 2.35$ HOLES. THE VERTICAL AXIS IS 90° TO THE HORIZONTAL AXIS, THROUGH THE CENTER OF DATUM Z

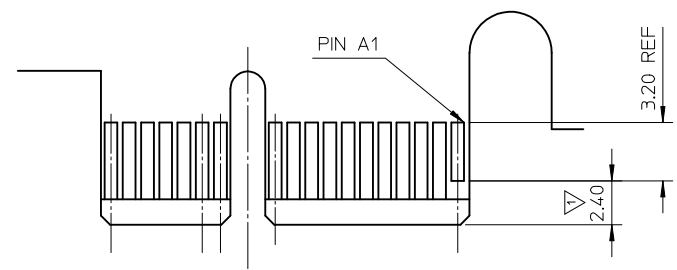
CONNECTOR LINK WIDTH	# POS REF	N	DIM 'A'
X4	64	20	23.15
X8	98	37	40.15

SEE SHEET 1	EC NO: SH2010-0425	2010/05/14	2010/05/14	QUALITY SYMBOLS $F_A=0$ $F_G=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	DRWR:ZHANG	2004/07/20	2004/07/20		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)	
	CHKD:ALLEN LIN	2004/07/20	2004/07/20		3 PLACES	± ---	± ---	CHECKED BY	DATE			
	APPR:XJSONG	2010/06/03				2 PLACES	± 0.25	± ---	APPROVED BY	DATE		
				1 PLACE	± 0.25	± ---	WILSON	2004/07/20		MOLEX INCORPORATED		
					ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
					DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 4		SD-87715-207		2 OF 4	
							SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



← I/O PANEL DIRECTION

PRIMARY (COMPONENT) SIDE



I/O PANEL DIRECTION →

SECONDARY (SOLDER) SIDE

- 1 NO TIE BAR PERMITTED FROM CARD EDGE TO LEADING EDGE OF PAD FOR PINS A1 AND "C".
- 2 CHAMFER EDGES MUST BE FREE OF CUTTING BURRS.
- 3. TOLERANCE: .XX±.13

CONNECTOR LINK WIDTH	# POS REF	N	DIM 'B'	'C'
X4	64	20	22.15	B17, B31
X8	98	37	39.15	B17, B31 B48

SEE SHEET 1
 EC NO: SH2010-0425
 DR: WNRZhang 2010/05/14
 CHK: ALLEN LIN 2004/07/20
 APPR: XJ.SONG 2010/06/03

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
$F_{A/0}$	4 PLACES ± ---	± ---
$F_{B/0}$	3 PLACES ± ---	± ---
$F_{C/0}$	2 PLACES ± 0.25	± ---
	1 PLACE ± 0.25	± ---
	ANGULAR ± 3°	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY			METRIC	
DRAWN BY	DATE	TITLE		
TOM	2004/07/20	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)		
CHECKED BY	DATE			
ALLEN LIN	2004/07/20			
APPROVED BY	DATE	MOLEX INCORPORATED		
WILSON	2004/07/20			
MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
SEE SHEET 4	SD-87715-207	3 OF 4		

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH
87715-9100	64	NYLON46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	2.54
87715-9101					10 MICROINCH	
87715-9102					15 MICROINCH	
87715-9103					GOLD FLASH	3.00
87715-9104					10 MICROINCH	
87715-9105					15 MICROINCH	
87715-9106					30 MICROINCH	2.54
87715-9107					GOLD FLASH	2.30
87715-9108					15 MICROINCH	
87715-9109	30 MICROINCH					

MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH
87715-9200	98	NYLON46	BLACK	PHOSPHOR BRONZE	GOLD FLASH	2.54
87715-9201					10 MICROINCH	
87715-9202					15 MICROINCH	
87715-9203					GOLD FLASH	3.00
87715-9204					10 MICROINCH	
87715-9205					15 MICROINCH	
87715-9206					30 MICROINCH	2.54
87715-9207					GOLD FLASH	2.30
87715-9208					15 MICROINCH	
87715-9209	30 MICROINCH					

MOLEX P/N	CIRCUIT SIZE	HOUSING MATERIAL	HOUSING COLOR	TERMINAL MATERIAL	CONTACT PLATING	SOLDER TAIL 'D' LENGTH
87715-9602	98	NYLON46	BLACK	BRASS	15 MICROINCH	2.54

SEE SHEET 1 EC NO: SH2010-0425 DRW: RZHUANG 2010/05/14 CHKD: ALLEN LIN 2004/07/20 APPR: XJ.SONG 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$F_A=0$ $F_C=0$ $F_P=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 3 °	MM ONLY		METRIC	
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY	DATE	TITLE	
	REV		TOM	2004/07/20	PCI EXPRESS EDGE CARD CONNECTOR (LEAD FREE VERSION)	
			CHECKED BY	DATE	MOLEX MOLEX INCORPORATED	
			ALLEN LIN	2004/07/20	SD-87715-207	
			APPROVED BY	DATE	SHEET NO.	
			WILSON	2004/07/20	4 OF 4	
			MATERIAL NO.	SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	